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(71) Applicant (for all designated States except US): **THE JOHNS HOPKINS UNIVERSITY** [US/US]; 34th & Charles Street, Baltimore, MD 21218 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MIGLIACCIO, Americo, A.** [AU/US]; 21B Matinee Court, Owings Mills, MD 21117 (US). **DELLA SANTINA, Charles** [US/US]; 912 Fairway Drive, Towson, MD 21286 (US). **MAC-DOUGALL, Hamish, G.** [AU/AU]; 309/99 Dowling Street, Woolloomooloo, NSW 2011 (AU).

(74) Agent: **GUFFEY, Larry, J.**; World Trade Center, Suite 1800, 401 East Pratt Street, Baltimore, MD 21202 (US).

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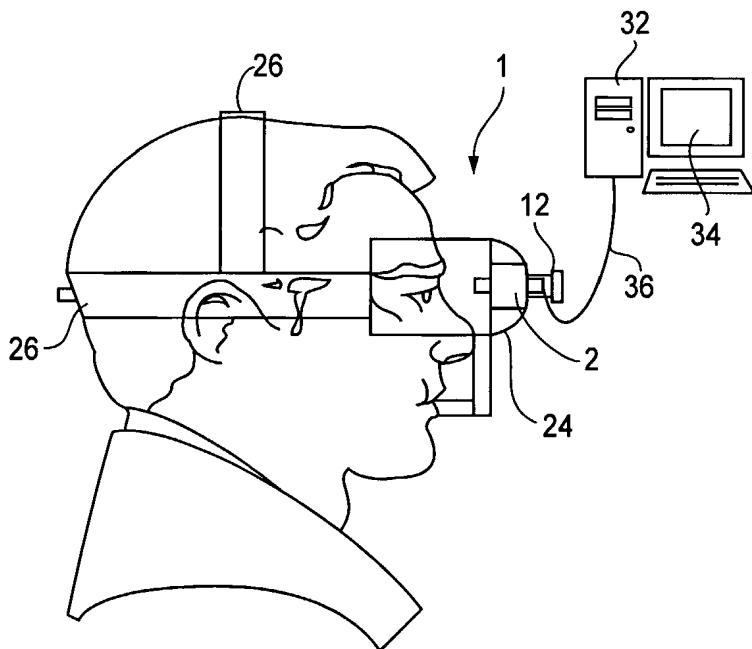
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(54) Title: METHOD AND APPARATUS FOR THREE-DIMENSIONAL VIDEO-OCULOGRAPHY



(57) Abstract: A device (1) for measuring the three-dimensional movements of an eye includes: (a) a marker array (6) that identifies prescribed positions on the eye whose movements are to be measured, (b) a digital camera (2) for capturing the two-dimensional images of this marker array (6) as the eye is moved, (c) a light source (12) that illuminates the marker array (6) with an output that is outside the spectral range of the camera (2), (d) light sources (20) that are used to align the camera's optical axis with the center of the eye, (e) an algorithm for computing the three-dimensional positions of the marker array (6) from the information contained in the captured digital images, and (f) a base (16) for fixing the position of the camera relative to the position of the eye, wherein the materials of the marker array (6) are chosen so that the array has the ability to, when illuminated as described above, give off energy that is in the spectral range of the device's camera (2).



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*